#### **REMARKS**

In the Office Action, the Examiner indicated that claims 1 through 20 are pending in the application and the Examiner rejected all claims.

# Claim Rejections, 35 U.S.C. §§102 and 103

On page 2 of the Office Action, the Examiner rejected claims 1, 2, 4-6, 8, 9, 12-14, 16, 17, and 19 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent No. 5,701,400 to Amado. On page 5 of the Office Action, the Examiner rejected claims 3, 10, 11, and 18 under 35 U.S.C. §103(a) as being unpatentable over Amado in view of U.S. Patent No. 6,553,366 to Miller et al., and the Examiner rejected claims 7, 15, and 20 under 35 U.S.C. §103(a) as being unpatentable over Amado in view of U.S. Patent No. 6,581,054 to Bogrett.

# **The Present Invention**

The present invention is a method and system for diagnosing data problems in a database. The system provides a test program for running simultaneously a series of tests on the data base. In the test program, a set of queries corresponding to the series of tests are defined. Then these queries are defined as fields of a larger query, such that the test results appear merely as small tables. Using the SQL commands "WITH" and "LEFT OUTER JOIN" the multiple tests can be implemented in the larger query and displayed in a single table. This enables an operator to diagnose easily the nature and location of data problems in the database.

#### **U.S. Patent No. 5,701,400 to Amado**

- U.S. Patent No. 5,701,400 to Amado ("Amado") teaches a system for applying artificial intelligence technology to data stored in databases. Diagnostics are generated that are user-definable interpretations of information in the database. The Examiner relies on Amado for the following asserted teachings:
  - (A) the identification of a set of tests to be performed on a database (referring to Figures 4 and 12 and column 38, lines 12-29);
  - (B) the preparation of a test program corresponding to the set of identified tests using SQL (referring to column 11, lines 56-57);
  - (C) the execution of the test program on the database so that the set of tests are performed on the database simultaneously (referring to column 39, lines 1-5);
  - (D) automatically providing the results of the test program in a predetermined format so that data problems in a database can be diagnosed by reviewing the results (referring to column 39, lines 16-29); and
  - (E) the implementation of a preparing step using the WITH command (referring to column 74, lines 34-38).

#### U.S. Patent No. 6,553,366 to Miller et al.

U.S. Patent No. 6,553,366 to Miller et al. ("Miller") teaches a method, apparatus, and article of manufacture for performing data mining applications in a relational database

management system. The Examiner relies on Miller for an asserted teaching of the use of the OUTER JOIN command to provide a display in which all rows for all key column values are displayed and any missing values from other tables are filled with null values.

# U.S. Patent No. 6,581,054 to Bogrett

U.S. Patent No. 6,581,054 to Bogrett ("Bogrett") teaches a method for generating database queries including storing a predefined query model for querying a database. An accessible portion of the predefined query model is displayed to a user upon request. The Examiner relies upon Bogrett for an asserted teaching of the display of a set of predetermined queries to a user (reference column 2, lines 7-8) and the receiving of the user's response to each of the predetermined queries (reference column 2, lines 8-10).

#### Rejections under 35 U.S.C. §102

The rejections under 35 U.S.C. §102 are rendered moot by this amendment; while applicant does not concede the Examiner's position regarding the rejection under 35 U.S.C. §102, applicant has opted at this time to amend each of the independent claims to include limitations already presented to the Examiner, which limitations the Examiner admits are not taught by Amado. Accordingly, the Examiner is requested to reconsider and withdraw the rejection of the claims under 35 U.S.C. §102.

## Rejection under §103(a) Based on the Combination of Amado and Miller

# The Examiner has not Established a prima facie Case of Obviousness

As set forth in the MPEP:

To establish a *prima facie* case of obviousness, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skilled in the art, to modify the reference or to combine reference teachings.

MPEP 2143

The Examiner has not met this burden. The present invention provides a simple, novel, and non-obvious method and system for assisting a database administrator, for example, in the performance of his or her administrative functions. More specifically, the present invention utilizes SQL, a programming language with which database administrators are familiar, in a unique way that simplifies the identification of problems within a database.

In accordance with the present invention, the database administrator or other operator of the testing system identifies multiple tests to be performed. Then, using the WITH command of SQL, these multiple tests are essentially linked as a single "query", thereby enabling a single query to be utilized to run multiple tests at the same time. To simplify the display of the results of this multiple testing process, the SQL command OUTER JOIN is utilized so that the results are displayed in a manner enabling the database administrator or other user of the test program to quickly identify which of the tables within the database have passed each test and which have failed each test. The results are aligned such that each test represents a column in the table displayed by the system and each table under test is displayed

having either a pass or a fail result with respect to that test (reference Figure 2 of the present application).

Nothing in Amado teaches or suggests such capability. Applicant acknowledges that Amado uses the term "SQL" in its text; Amado indicates that it is "likely" that SQL "will be available as the standard interface language" for use with the invention of Amado. Applicant does not purport to have invented the use of SQL in computer processing. However, applicant has made a unique use of certain of the SQL commands to enable a user of the system of the present invention to achieve an ease of use unavailable by prior art systems.

The Examiner appears to rely upon Amado for an alleged teaching of the use of the WITH command of SQL to prepare a series of test to be performed simultaneously. Again, applicant does not to have invented the process of performing multiple tests simultaneously. However, applicant has identified the WITH command of SQL as being particularly useful for this process, and in combination with the OUTER JOIN command as claimed, provides a simple way for testing of the database and display of the results in a user-friendly manner. Nothing in Amado teaches or suggests these features. Amado is a relatively large patent that contains over 100 columns and it appears that the Examiner has selectively searched this document for certain words that correspond to key words utilized in the present claims. However, their existence in the text of Amado notwithstanding, it is inappropriate for the Examiner to make a rejection without applying it in context to the claimed invention.

The addition of Miller does not render the present invention obvious. Miller simply mentions the use of the OUTER JOIN command of SQL to display text or results in a manner

consistent with the definition of the use of the OUTER JOIN command of SQL. Applicant acknowledges that it is not the first user or the inventor of the OUTER JOIN command of SQL and that, indeed, the OUTER JOIN command of SQL will display data as described in Miller. However, nothing in Miller teaches or suggests a simplified testing and display procedure as claimed in the present invention whereby the WITH and OUTER JOIN commands of SQL are combined to provide a simplified test method and display of test results. The Examiner has not pointed to anywhere in either of the references where there is a suggestion to modify the teachings thereof to achieve the present invention. Without such a suggestion, it is improper for the Examiner to reject the claims under 35 U.S.C. § 103.

Each of the pending claims contain the requirement that the novel testing process of the present invention utilize both the WITH and OUTER JOIN commands of SQL to perform their functions.

The addition of Bogrett does not supply the missing teachings or suggestions.

Accordingly, it is submitted that the present invention patentably defines over Amado, Miller, and/or Bogrett.

#### Conclusion

The present invention is not taught or suggested by the prior art. Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection of the claims. An early Notice of Allowance is earnestly solicited.

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The Commissioner is hereby authorized to charge any fees associated with this communication to Deposit Account No. 19-5425.

Respectfully submitted

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Date

Mark D. Simpson, Esquire

Registration No. 32,942

SYNNESTVEDT & LECHNER LLP 2600 ARAMARK Tower 1101 Market Street Philadelphia, PA 19107

Telephone: (215) 923-4466 Facsimile: (215) 923-2189

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